

Waterfowl Censuses on the Mississippi River from St. Louis, Missouri, to  
Cairo, Illinois: 15 November 1979 through 10 April 1980

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Ten survey flights were made at approximately 2-week intervals. These surveys were made in the same manner and by the same individual (Crompton) as the surveys made in the same area for the previous 7 seasons (Bellrose et al. 1973, Sanderson et al. 1974, 1975, 1976, 1977, 1978, and 1979). The flights began later (15 November 1979) than in 1978 (27 October), but the distribution of the flights ~~was~~ similar for the 2 seasons. The last flight made in the spring of 1979 was on 9 April and the last flight in the spring of 1980 was on 10 April. Eleven flights were made in each of 1975-76, 1977-78, and 1978-79; 12 flights were made in 1976-77; 9 flights were made in each of the first 3 seasons; and 10 flights were made in 1979-80.

Additional surveys to determine the use of this section of the river by herons were made in the spring of each year from 1973 through 1977 (Graber 1973, 1974, 1975, 1976, and 1977). The studies of herons were completed in 1977.

Only those species of waterfowl listed in Table 1 were identified during these flights over the past 8 seasons. Birds censused on these flights in 1979-80 included 17 species of ducks, 2 species of geese, coots, cormorants, and bald eagles. No species were seen in 1979-80 that had not been previously censused on this stretch of the river. The red-breasted merganser, bufflehead,

and cormorant--seen for the first time in 1978-79--were censused in 1979-80. The small races of Canada geese, identified only in 1978-79, were not seen in 1979-80. The northern shoveler, seen each of the previous 7 seasons, was not censused in 1979-80.

A comparison of the censuses for the past 8 years is shown in Tables 2 and 3. In total birds counted in 1979-80, the numbers were either highest (mallard, pintail, coot, lesser scaup, canvasback, blue-winged teal, American green-winged teal, hooded merganser, red-breasted merganser, bufflehead, cormorant, and bald eagle) or second only to the counts in 1978-79 (black duck, common goldeneye, common merganser, American wigeon, ring-necked duck, redhead, gadwall, and ruddy duck) for 20 of the 23 species censused. The highest total counts of Canada geese and lesser snow geese were in 1978-79, the second highest in 1976-77, and the third highest in 1979-80. No northern shovelers were seen in 1979-80; the highest count for this species was 8,294 in 1978-79.

The 12 species with the highest counts in 1979-80, plus the black duck, all showed increases in the number counted per census flight from 1978-79 to 1979-80 (Table 3). Except for the black duck, all species that had the second highest total counts in 1979-80 also had the second highest counts per census flight. Species for which 1,000 or more individuals were counted in 1978-79 or in 1979-80 that showed changes of 10% or more per flight from 1978-79 to 1979-80 were as follows: Increases--green-winged teal, 124.6%, pintail, 50.3%, blue-winged teal, 65.7%, lesser scaup, 39.3%, canvasback, 29.9%, mallard, 19.2%, and coot, 14.2%. Decreases--northern shoveler, 100%, lesser snow goose, 84.5%, gadwall, 77.8%, common goldeneye, 41.9%, common merganser, 41.2%, redhead, 32.0%, ring-necked duck, 28.3%, and Canada goose, 23.4%.

The highest total counts were for the mallard, Canada goose, coot, lesser scaup, common goldeneye, and ring-necked duck. These same 6 species had the

highest total counts in 1978-79 except that the lesser snow goose was replaced by the ring-necked duck in 1979-80. The 6 species with the highest total counts in 1979-80 averaged from 2,480 ring-necked ducks to 16,790 mallards seen per census.

Last year (Sanderson et al. 1979) we speculated that the lower than average winter temperatures and above average amounts of snow for the previous 3 winters were responsible for the "higher than average numbers of Canada geese, mallards, and bald eagles counted on this section of the Mississippi River." The winter of 1979-80 was milder than average and there was less than an average amount of snow. Although the total number and number seen per flight declined substantially for the Canada goose in 1979-80, both the mallard and bald eagle had the highest total counts and the highest average counts per census flight in 1979-80.

Floods were perhaps a factor again in 1979-80. The river was high but not out of its banks from Crystal City to Cairo on 25 March 1980. On this date 50% of the dabblers and 10% of the divers were in flooded fields on the Illinois side from Cape Girardeau to Cairo and 10% of the dabblers were in flooded fields on the Illinois side from Grand Tower to Cape Girardeau. The river was high but not out of its banks on 10 April 1980. From Cape Girardeau to Cairo 60% of the dabblers and 40% of the divers were in flooded fields on both the Illinois and Missouri sides, and 40% of the dabblers and 20% of the divers were in flooded fields on the Illinois side from Grand Tower to Cape Girardeau.

In the report last year (Sanderson et al. 1979) we stated: "The bald eagle apparently responded to the severe winter weather in 1976-77, 1977-78, and 1978-79. The count on this stretch of the river went from 30 on 19 January 1977 to 115 on 2 February and back to 31 on 16 February. The distribution of eagles during the 1977-78 season was probably a reflection of the colder than



average temperatures that prevailed longer than they did during the previous season. The count of eagles from St. Louis to Cairo increased from 16 on 18 November 1977 to 66 on 7 December and stayed high through 22 March 1978, when 55 were still present. By 12 April 1978, 16 eagles were counted, whereas during the previous season the last eagle was counted on 16 February when only 8 were present. The distribution of eagles during 1978-79 was similar to the previous year. The count increased from 45 on 1 December to 78 on 13 December and stayed high through 12 March 1979 when 57 were still present. On 26 March 29 eagles were counted."

In spite of very different weather conditions in 1979-80, the distribution of eagles was similar to the previous 2 years. The count increased from 46 on 30 November 1979 to 73 on 13 December and stayed high through 3 March 1980 when 175 were still present. On 25 March 20 eagles were counted, but none was seen on 10 April.

If the severe winter weather conditions caused the eagles to use this stretch of the river more than average in 1977-78 and 1978-79, perhaps the eagles have become accustomed to this section of the river and continued to use it during the mild winter of 1979-80. If the winter of 1980-81 is "average," it will be interesting to see how the eagles are distributed.

Perhaps an increasing population is partially responsible for the increased use of the Mississippi River from St. Louis to Cairo by bald eagles. There has been a steady increase in the total number of eagles counted (from 43 to 912) and in the number counted per flight (from 5 to 91) on the Mississippi River from St. Louis to Cairo from 1972-73 through 1979-80 (Tables 2, 3).

As we have stated in the past, these data for both waterfowl and eagles continue to indicate some of the variations to be expected because of changes in flyway populations, local habitat conditions (food, water levels, and similar conditions), weather, chance, and unknown factors. These are reasons we hope to continue these censuses for at least 2 more years to obtain the

10-year series we feel is the minimum required to provide sound baseline data for use of this area by waterfowl.

We note the continued use of this part of the river by small numbers of the ruddy duck, hooded merganser, red-breasted merganser, bufflehead, and cormorant--species that were not present during our first censuses.

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Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980-- Canada goose.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	0	0	0	39	190	316	1,120	895	2,560
30 Nov 79	35	0	0	0	210	687	2,196	4,508	7,636
13 Dec 79	60	0	0	28	321	800	2,668	5,860	9,737
4-8 Jan 80	25	6	0	84	320	808	1,364	2,807	5,414
21 Jan 80	40	0	8	64	83	192	687	1,415	2,489
4 Feb 80	75	0	0	118	663	1,207	5,892	7,245	15,200
18 Feb 80	150	0	30	71	1,376	4,105	9,560	11,884	27,176
3 Mar 80	400	12	95	724	1,740	6,215	10,487	13,950	33,623
25 Mar 80 <sup>a</sup>	125	0	8	95	232	456	2,005	4,150	7,071
10 Apr 80 <sup>b</sup>	15	0	0	36	128	295	650	825	1,949
Total	1,025	18	141	1,259	5,263	15,081	36,629	53,539	112,855

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.

Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--mallard.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	2,100	10	37	274	1,480	655	1,237	933	6,726
30 Nov 79	1,600	24	39	123	1,280	962	2,448	3,116	9,592
13 Dec 79	3,200	12	27	179	654	1,223	3,305	4,768	13,368
4-8 Jan 80	1,200	38	67	279	747	1,126	1,692	2,384	7,533
21 Jan 80	4,100	24	72	218	656	879	550	437	6,936
4 Feb 80	700	33	105	350	878	1,882	5,115	3,860	12,923
18 Feb 80	3,800	60	273	910	1,768	7,525	4,932	7,895	27,163
3 Mar 80	2,400	112	490	1,408	2,371	6,950	8,823	11,687	34,241
25 Mar 80 <sup>a</sup>	3,800	52	103	398	6,335	4,123	9,880	14,645	39,336
10 Apr 80 <sup>b</sup>	850	16	24	396	673	1,380	2,890	3,850	10,079
Total	23,750	381	1,237	4,535	16,842	26,705	40,872	53,575	167,897

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.



Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--black duck.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	40	2	4	15	42	19	33	28	183
30 Nov 79	35	4	8	16	35	28	44	67	237
13 Dec 79	75	0	4	25	33	40	88	117	382
4-8 Jan 80	25	18	14	20	26	33	39	52	227
21 Jan 80	80	8	11	19	25	33	21	28	225
4 Feb 80	30	5	11	19	30	49	136	82	362
18 Feb 80	80	8	11	38	45	161	98	169	610
3 Mar 80	50	9	14	35	57	133	183	258	739
25 Mar 80 <sup>a</sup>	80	4	10	19	140	90	188	380	911
10 Apr 80 <sup>b</sup>	25	3	4	14	21	28	35	60	190
Total	520	61	91	220	454	614	865	1,241	4,066

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.

Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--common goldeneye.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	75	0	0	13	69	31	50	24	262
30 Nov 79	450	0	0	0	105	141	520	284	1,500
13 Dec 79	750	21	13	75	279	417	890	696	3,141
4-8 Jan 80	475	72	118	256	315	640	324	473	2,673
21 Jan 80	600	20	53	127	224	176	305	422	1,927
4 Feb 80	425	8	127	415	940	1,253	1,780	485	5,433
18 Feb 80	800	35	224	307	566	1,372	1,855	2,498	7,657
3 Mar 80	600	37	101	559	1,220	978	1,142	1,545	6,182
25 Mar 80 <sup>a</sup>	65	0	12	27	18	36	154	70	382
10 Apr 80 <sup>b</sup>	0	0	0	7	18	10	20	15	70
Total	4,240	193	648	1,786	3,754	5,054	7,040	6,512	29,227

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.

Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--common merganser.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	30	0	0	5	18	10	12	8	83
30 Nov 79	125	0	0	0	24	37	119	62	367
13 Dec 79	225	4	0	21	86	169	386	203	1,094
4-8 Jan 80	185	16	27	83	149	217	103	198	978
21 Jan 80	200	0	13	36	49	37	68	75	478
4 Feb 80	150	0	30	72	261	424	596	89	1,622
18 Feb 80	250	9	92	164	369	425	582	1,126	3,017
3 Mar 80	175	11	39	192	485	371	482	747	2,502
25 Mar 80 <sup>a</sup>	20	0	0	13	4	12	38	25	112
10 Apr 80 <sup>b</sup>	5	0	0	3	6	2	8	0	24
Total	1,365	40	201	589	1,451	1,704	2,394	2,533	10,277

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.



Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980-- pintail.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	200	0	0	0	125	30	16	40	411
30 Nov 79	65	0	0	0	125	0	0	38	228
13 Dec 79	0	0	0	0	0	26	97	204	327
4-8 Jan 80	0	0	0	0	0	0	0	0	0
21 Jan 80	40	0	0	0	0	0	27	16	83
4 Feb 80	0	0	0	0	0	0	0	27	27
18 Feb 80	100	0	0	0	0	86	164	378	728
3 Mar 80	300	0	0	40	85	271	489	732	1,917
25 Mar 80 <sup>a</sup>	1,500	0	0	53	925	1,860	1,438	4,920	10,696
10 Apr 80 <sup>b</sup>	200	0	0	88	37	408	170	215	1,118
Total	2,405	0	0	181	1,297	2,681	2,401	6,570	15,535

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.

Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--coot.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	400	50	75	120	275	164	430	316	1,830
30 Nov 79	6,000	15	36	82	283	190	448	621	7,675
13 Dec 79	2,400	18	0	155	80	127	645	370	3,795
4-8 Jan 80	0	0	0	0	0	25	60	198	283
21 Jan 80	300	0	0	0	0	58	45	73	476
4 Feb 80	0	0	0	0	0	0	0	32	32
18 Feb 80	0	0	0	0	0	0	29	68	97
3 Mar 80	0	0	0	0	35	82	179	234	530
25 Mar 80 <sup>a</sup>	12,000	218	375	1,560	3,775	2,400	9,925	16,980	47,233
10 Apr 80 <sup>b</sup>	1,000	215	98	505	762	870	2,575	4,125	10,150
Total	22,000	516	584	2,422	5,210	3,916	14,336	23,017	72,101

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.

Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--American wigeon.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	500	0	8	40	177	26	81	52	884
30 Nov 79	150	0	10	10	290	86	540	327	1,413
13 Dec 79	425	0	0	10	72	127	473	650	1,757
4-8 Jan 80	0	0	0	0	84	0	78	116	278
21 Jan 80	175	0	0	0	0	18	36	52	281
4 Feb 80	0	0	0	0	0	34	157	78	269
18 Feb 80	100	0	16	0	33	105	159	93	506
3 Mar 80	200	0	10	87	196	388	705	870	2,456
25 Mar 80 <sup>a</sup>	700	0	24	72	2,750	1,975	1,655	2,842	10,018
10 Apr 80 <sup>b</sup>	100	0	18	114	90	406	675	825	2,228
Total	2,350	0	86	333	3,692	3,165	4,559	5,905	20,090

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.



Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--lesser scaup.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-St. Genevieve	St. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	175	0	0	70	124	311	547	256	1,483
30 Nov 79	0	0	20	16	61	139	853	176	1,265
13 Dec 79	50	0	0	0	312	4,884	1,383	2,515	9,144
4-8 Jan 80	0	0	0	0	0	104	62	56	222
21 Jan 80	165	0	0	0	0	48	23	64	300
4 Feb 80	0	0	0	0	0	55	122	341	518
18 Feb 80	0	0	0	0	0	24	87	64	175
3 Mar 80	0	0	0	27	85	153	215	356	836
25 Mar 80 <sup>a</sup>	875	0	62	554	1,985	4,300	14,780	21,500	44,056
10 Apr 80 <sup>b</sup>	625	0	0	1,728	984	1,460	1,855	2,575	9,227
Total	1,890	0	82	2,395	3,551	11,478	19,927	27,903	67,226

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.

Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--ring-necked duck.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	80	0	0	33	87	64	162	93	519
30 Nov 79	0	0	0	8	86	35	297	84	510
13 Dec 79	0	0	0	0	48	372	415	490	1,325
4-8 Jan 80	0	0	0	0	0	0	0	0	0
21 Jan 80	30	0	0	0	0	0	0	0	30
4 Feb 80	0	0	0	0	0	0	34	50	84
18 Feb 80	0	0	0	0	0	0	11	20	31
3 Mar 80	0	0	0	0	30	17	38	97	182
25 Mar 80 <sup>a</sup>	300	0	20	126	780	2,950	5,775	8,925	18,876
10 Apr 80 <sup>b</sup>	450	0	0	562	276	385	640	985	3,298
Total	860	0	20	729	1,307	3,823	7,372	10,744	24,855

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.

Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--canvasback.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	0	0	0	20	0	8	74	48	150
30 Nov 79	0	0	0	0	33	16	108	82	239
13 Dec 79	0	0	0	0	60	143	578	942	1,723
4-8 Jan 80	0	0	0	0	0	198	225	173	596
21 Jan 80	900	0	0	0	0	32	74	186	1,192
4 Feb 80	0	0	0	0	39	105	397	680	1,221
18 Feb 80	175	0	0	17	55	172	290	577	1,286
3 Mar 80	400	0	0	190	354	560	846	1,238	3,588
25 Mar 80 <sup>a</sup>	400	0	0	34	216	145	333	1,050	2,178
10 Apr 80 <sup>b</sup>	75	0	0	395	174	490	765	860	2,759
Total	1,950	0	0	656	931	1,869	3,690	5,836	14,932

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.



Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--lesser snow goose.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	0	0	0	15	50	27	56	24	172
30 Nov 79	0	0	0	13	56	43	188	375	675
13 Dec 79	15	0	0	0	46	135	370	124	690
4-8 Jan 80	0	0	0	0	16	42	105	62	225
21 Jan 80	0	0	0	0	8	17	32	16	73
4 Feb 80	0	0	0	0	0	16	53	27	96
18 Feb 80	0	0	8	0	97	13	74	52	244
3 Mar 80	75	0	0	192	256	95	218	347	1,183
25 Mar 80 <sup>a</sup>	40	0	0	27	50	534	1,220	2,685	4,556
10 Apr 80 <sup>b</sup>	5	0	0	17	39	104	150	110	425
Total	135	0	8	264	618	1,026	2,466	3,822	8,339

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.

Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--redhead.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-St. Genevieve	St. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	0	0	0	0	0	10	14	7	31
30 Nov 79	0	0	0	0	0	0	31	26	57
13 Dec 79	0	0	0	0	0	0	40	56	96
4-8 Jan 80	0	0	0	0	0	0	0	0	0
21 Jan 80	0	0	0	0	0	0	0	0	0
4 Feb 80	0	0	0	0	0	0	0	0	0
18 Feb 80	0	0	0	0	0	0	0	0	0
3 Mar 80	0	0	0	0	0	0	0	0	0
25 Mar 80 <sup>a</sup>	150	0	0	35	62	110	65	325	747
10 Apr 80 <sup>b</sup>	115	0	0	70	89	124	125	250	773
Total	265	0	0	105	151	244	275	664	1,704

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.

Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--blue-winged teal.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	0	0	0	0	0	0	0	0	0
30 Nov 79	0	0	0	0	0	0	0	0	0
13 Dec 79	0	0	0	0	0	0	0	0	0
4-8 Jan 80	0	0	0	0	0	0	0	0	0
21 Jan 80	0	0	0	0	0	0	0	0	0
4 Feb 80	0	0	0	0	0	0	0	0	0
18 Feb 80	0	0	0	0	0	0	0	0	0
3 Mar 80	0	0	0	0	0	0	0	0	0
25 Mar 80 <sup>a</sup>	650	0	0	0	70	324	1,566	8,355	10,965
10 Apr 80 <sup>b</sup>	760	31	121	446	387	629	2,300	4,100	8,764
Total	1,400	31	121	446	457	953	3,866	12,455	19,729

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.



Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--American green-winged teal.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	0	0	0	16	55	22	38	86	217
30 Nov 79	0	0	0	0	55	0	24	41	120
13 Dec 79	0	0	0	0	0	0	0	0	0
4-8 Jan 80	0	0	0	0	0	0	0	0	0
21 Jan 80	0	0	0	0	0	0	0	0	0
4 Feb 80	0	0	0	0	0	0	0	0	0
18 Feb 80	0	0	0	0	0	0	0	0	0
3 Mar 80	0	0	0	0	0	0	0	0	0
25 Mar 80 <sup>a</sup>	400	0	0	0	35	103	970	3,275	4,783
10 Apr 80 <sup>b</sup>	425	10	72	367	216	341	1,225	2,350	5,006
Total	825	10	72	383	361	466	2,257	5,752	10,126

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.

Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--gadwall.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	0	0	0	0	13	8	45	26	92
30 Nov 79	0	0	0	0	0	0	33	16	49
13 Dec 79	0	0	0	0	0	0	0	0	0
4-8 Jan 80	0	0	0	0	0	0	0	0	0
21 Jan 80	0	0	0	0	0	0	0	0	0
4 Feb 80	0	0	0	0	0	0	0	0	0
18 Feb 80	0	0	0	0	0	0	0	0	0
3 Mar 80	0	0	0	0	0	0	8	16	24
25 Mar 80 <sup>a</sup>	150	0	0	0	0	54	112	458	774
10 Apr 80 <sup>b</sup>	25	0	0	29	12	43	60	115	284
Total	175	0	0	29	25	105	258	631	1,223

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.

Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--hooded merganser.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	0	0	0	0	0	0	12	6	18
30 Nov 79	20	0	0	0	0	9	27	18	74
13 Dec 79	40	0	0	0	0	8	22	56	126
4-8 Jan 80	0	0	0	0	0	0	0	0	0
21 Jan 80	40	0	0	12	0	5	16	0	73
4 Feb 80	25	0	0	0	6	0	10	18	59
18 Feb 80	0	0	0	0	10	18	24	46	98
3 Mar 80	0	0	0	0	11	24	13	32	80
25 Mar 80 <sup>a</sup>	15	0	0	0	0	0	16	32	63
10 Apr 80 <sup>b</sup>	0	0	0	0	0	0	0	0	0
Total	140	0	0	12	27	64	140	208	591

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.

Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--ruddy duck.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	0	0	0	0	0	8	21	13	42
30 Nov 79	0	0	0	0	7	0	27	8	42
13 Dec 79	0	0	0	0	0	9	70	46	125
4-8 Jan 80	0	0	0	0	0	0	0	0	0
21 Jan 80	0	0	0	0	0	0	0	0	0
4 Feb 80	0	0	0	0	0	0	0	0	0
18 Feb 80	0	0	0	0	0	0	0	0	0
3 Mar 80	0	0	0	0	0	0	0	0	0
25 Mar 80 <sup>a</sup>	50	0	0	24	115	22	45	80	336
10 Apr 80 <sup>b</sup>	0	0	0	4	0	0	18	30	52
Total	50	0	0	28	122	39	181	177	597

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.



Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--red-breasted merganser.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	0	0	0	0	0	0	0	0	0
30 Nov 79	0	0	0	0	0	0	0	0	0
13 Dec 79	0	0	0	0	0	11	53	24	88
4-8 Jan 80	0	0	0	0	0	16	10	21	47
21 Jan 80	0	0	0	10	7	6	0	0	23
4 Feb 80	0	0	0	0	0	21	0	10	31
18 Feb 80	0	0	0	10	0	36	18	60	124
3 Mar 80	0	0	0	0	0	0	0	0	0
25 Mar 80 <sup>a</sup>	0	0	0	0	0	0	0	0	0
10 Apr 80 <sup>b</sup>	0	0	0	0	0	0	0	0	0
Total	0	0	0	20	7	90	81	115	313

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.

Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--bufflehead.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	0	0	0	0	32	0	16	20	68
30 Nov 79	0	0	0	0	13	0	27	11	51
13 Dec 79	85	0	0	0	0	30	14	27	156
4-8 Jan 80	0	0	0	0	0	0	0	0	0
21 Jan 80	0	0	0	0	0	0	0	0	0
4 Feb 80	0	0	0	0	0	0	0	0	0
18 Feb 80	0	0	0	0	0	0	0	0	0
3 Mar 80	0	0	0	0	0	0	0	0	0
25 Mar 80 <sup>a</sup>	50	0	0	52	20	55	32	80	289
10 Apr 80 <sup>b</sup>	20	0	0	0	32	21	50	75	198
Total	155	0	0	52	97	106	139	213	762

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.

Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--comorant.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-St. Genevieve	St. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	0	0	0	0	0	0	0	0	0
30 Nov 79	0	0	0	0	0	0	0	0	0
13 Dec 79	0	0	0	0	0	0	0	0	0
4-8 Jan 80	0	0	0	0	0	0	0	0	0
21 Jan 80	0	0	0	0	0	0	0	0	0
4 Feb 80	0	0	0	0	0	0	0	0	0
18 Feb 80	0	0	0	0	0	0	0	0	0
3 Mar 80	0	0	0	0	0	0	0	0	0
25 Mar 80 <sup>a</sup>	20	6	4	26	18	24	40	180	318
10 Apr 80 <sup>b</sup>	7	0	0	10	25	18	29	45	134
Total	27	6	4	36	43	42	69	225	452

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.

Table 1. Waterfowl censuses, Mississippi River--St. Louis, Missouri, to Cairo, Illinois--15 November 1979, 10 April 1980--bald eagle.

	St. Louis (Horseshoe Lake)	St. Louis-Kimmswick	Kimmswick-Crystal City	Crystal City-Ste. Genevieve	Ste. Genevieve-Chester	Chester-Grand Tower	Grand Tower-Cape Girardeau	Cape Girardeau-Cairo	Total
15 Nov 79	0	0	0	1	2	2	2	6	13
30 Nov 79	4	0	2	0	3	6	13	18	46
13 Dec 79	8	0	0	3	8	11	19	24	73
4-8 Jan 80	4	2	6	5	12	17	37	29	112
21 Jan 80	5	2	9	11	12	8	19	28	94
4 Feb 80	3	1	6	16	38	25	53	39	181
18 Feb 80	4	4	10	17	22	34	43	64	198
3 Mar 80	6	5	8	16	33	22	47	38	175
25 Mar 80 <sup>a</sup>	0	1	0	1	2	3	6	7	20
10 Apr 80 <sup>b</sup>	0	0	0	0	0	0	0	0	0
Total	34	15	41	70	132	128	239	253	912

<sup>a</sup>Crystal City-Grand Tower, river high, all birds on river. Grand Tower-Cape Girardeau, river very high, 10% dabblers in flooded fields on Illinois side. Cape Girardeau-Cairo, river very high but not out of banks, 50% of dabblers and 10% of divers in flooded fields on Illinois side.

<sup>b</sup>River high but not out of banks. Grand Tower-Cape Girardeau, 40% of dabblers and 20% of divers in flooded fields on Illinois side. Cape Girardeau-Cairo, 60% of dabblers and 40% of divers in flooded fields on both Illinois and Missouri sides.



Table 2. A comparison of the waterfowl censuses in the Mississippi River from St. Louis, Missouri, to Cairo, Illinois, 1972-73 through 1979-80.

Species	Number Counted on Aerial Flights <sup>a</sup>							
	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
Canada Goose	108,293	25,340	32,931	28,191	129,229	85,921	162,590	112,855
Mallard	36,624	15,491	33,613	65,128	117,008	60,483	154,951	167,897
Black Duck	1,842	1,729	2,609	2,795	3,384	2,748	4,324	4,066
Common Goldeneye	463	783	1,304	1,476	11,911	11,761	55,384	29,227
Common Merganser	164	743	740	554	3,293	2,773	19,235	10,277
Pintail	150	641	2,667	3,858	2,119	1,649	11,374	15,535
Coot	100	6,061	3,914	12,929	4,197	15,241	69,476	72,101
American wigeon	25	1,294	3,893	4,907	3,403	1,462	22,341	20,090
Lesser Scaup	11	5,415	2,756	3,049	2,035	9,114	44,907	67,226
Northern Shoveler	6	426	186	1,456	780	622	8,294	0
Ring-necked Duck	0	1,712	660	3,165	2,020	2,806	38,136	24,855
Canvasback	0	486	999	2,046	2,138	2,682	12,639	14,932
Lesser Snow Goose	0	418	772	1,530	15,444	1,768	59,147	8,339
Redhead	0	325	0	254	155	0	2,742	1,704
Blue-winged Teal	0	166	642	2,257	1,528	467	7,439	19,729
American Green-winged Teal	0	92	185	1,019	938	451	4,962	10,126
Gadwall	0	55	155	536	282	58	6,036	1,223
Ruddy Duck	0	0	38	79	20	46	820	597
Hooded Merganser	0	0	0	15	15	0	469	591
Red-breasted Merganser	0	0	0	0	0	0	208	313
Small Canada Geese	0	0	0	0	0	0	156	0
Bufflehead	0	0	0	0	0	0	73	762

Table 2 - continued.

Table 2. Continued - page 2.

Cormorant	0	0	0	0	0	0	312	452
Bald Eagle	43	68	119	197	280	461	908	912
Total <sup>b</sup>	147,678	61,177	88,065	135,244	299,899	200,052	685,703	582,395

<sup>a</sup>In 1975-76, 1977-78, and 1978-79 one extra early and one extra late flight were made, in 1979-80 one extra late flight was made, in 1976-77 another earlier flight was added, in other years nine flights were made.

<sup>b</sup>Does not include eagles and cormorants.

Table 3. A comparison of the number of waterfowl counted per flight on the Mississippi River from St. Louis, Missouri, to Cairo, Illinois, 1972-73 through 1979-80.

Species	Number Counted per Aerial Flight <sup>a</sup>							
	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
Canada Goose	12,032	2,816	3,659	2,563	10,769	7,811	14,781	11,286
Mallard	4,069	1,721	3,735	5,921	9,751	5,498	14,087	16,790
Black Duck	205	192	290	254	282	250	393	407
Common Goldeneye	51	87	145	134	992	1,069	5,035	2,923
Common Merganser	18	82	82	50	274	252	1,749	1,028
Pintail	17	71	296	351	176	150	1,034	1,554
Coot	11	673	435	1,175	350	1,386	6,316	7,210
American Wigeon	3	144	432	446	284	133	2,031	2,009
Lesser Scaup	1	602	306	277	170	828	4,083	6,723
Northern Shoveler	1	47	21	132	65	56	754	0
Ring-necked Duck	0	190	73	288	168	255	3,467	2,486
Canvasback	0	54	111	186	178	244	1,149	1,493
Lesser Snow Goose	0	46	86	139	1,287	161	5,377	834
Redhead	0	36	0	23	13	0	250	170
Blue-winged Teal	0	18	71	205	127	42	677	1,973
American Green-winged Teal	0	10	20	93	78	41	451	1,013
Gadwall	0	6	17	49	24	5	549	122
Ruddy Duck	0	0	4	7	2	4	75	60
Hooded Merganser	0	0	0	1	1	0	43	59
Red-breasted Merganser	0	0	0	0	0	0	19	31
Small Canada Geese	0	0	0	0	0	0	14	0
Bufflehead	0	0	0	0	0	0	7	76

Table 3 - continued.

Table 3. Continued - page 2.

Cormorant	0	0	0	0	0	0	29	45
Bald Eagle	5	8	13	18	23	42	83	91
Mean <sup>b</sup>	16,409	6,797	9,785	12,295	24,992	18,186	62,337	58,240

<sup>a</sup>In 1975-76, 1977-78, and 1978-79 one extra early and one extra late flight were made, in 1979-80 one extra late flight was made, in 1976-77 another earlier flight was added, in other years nine flights were made.

<sup>b</sup>Does not include eagles and cormorants.